ABSTRACT OF THE DISCLOSURE

In a gamma camera, a plurality of radiation detector elements having a rod-shaped first electrode, a semiconductor device surrounds the first electrode to contact with it for entering a radiation, and a second electrode provided for the side surface of the semiconductor device are detachably attached to a holding member. The holding member has a first electrode contact portion contacted with the first electrode and a second electrode contact portion contacted with the second electrode. A collimator in which a plurality of radiation paths provided corresponding to the plurality of radiation detector elements are formed is arranged on the radiation entering side of the plurality of radiation detector elements. A γ-ray detection signal outputted from the first electrode contact portion is sent to a signal processing integrated circuit. A high voltage is applied to the second electrode via the second electrode contact portion.